

IN THE CLAIMS

Please amend the claims as follows:

- 1-56. (Canceled)
57. (Currently Amended) A method for the stable transformation of monocot plant tissue or cells, comprising:
- a) contacting monocot plant tissue or cells with an *Agrobacterium* containing a recombinant DNA and one or more agents selected from the group consisting of a sulfhydryl-containing agent, methionine, an iron chelator, a copper chelator, an inhibitor of plant polyphenol oxidase and an inhibitor of plant peroxidases, which one or more agents are present in solid media in an amount effective to enhance the stable transformation of the monocot plant tissue or cells relative to corresponding monocot plant tissue or cells contacted with *Agrobacterium* in the absence of the one or more agents, wherein if the sulfhydryl-containing agent is cysteine, cysteine is present at a concentration of 50 mg/L to 2000 mg/L; and
 - b) identifying stably transformed plant tissue or cells.
58. (Original) The method of claim 57 or 62 wherein the efficiency of stable transformation in the presence of the agent is at least 10% greater than the efficiency of transformation in the absence of the agent.
59. (Previously Presented) The method of claim 57 or 62 wherein the efficiency of stable transformation in the presence of the agent is at least 0.5% greater than the efficiency of transformation in the absence of the agent.
60. (Previously Presented) The method of claim 57 or 62 wherein the transformed tissue or cells are identified by selection.

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61. (Original) The method of claim 60 wherein the transformed tissue or cells are selected for in hygromycin.
62. (Currently Amended) A method for the stable transformation of plant tissue or cells, comprising:
- a) contacting plant tissue or cells with an *Agrobacterium* containing a recombinant DNA and one or more agents selected from the group consisting of a sulfhydryl-containing agent, methionine, an iron chelator, a copper chelator, an inhibitor of plant polyphenol oxidase and an inhibitor of plant peroxidases, which one or more agents are present in solid media in an amount effective to enhance the stable transformation of the tissue or cells relative to corresponding tissue or cells contacted with *Agrobacterium* in the absence of the one or more agents, wherein if the sulfhydryl-containing agent is cysteine, cysteine is present at a concentration of 50 mg/L to 2000 mg/L; and
 - b) identifying stably transformed plant tissue or cells.
63. (Original) The method of claim 57 or 62 wherein the stable transformation is enhanced by at least 5-fold.
64. (Original) The method of claim 57 or 62 wherein the stable transformation is enhanced by at least 10%.
65. (Original) The method of claim 57 or 62 further comprising regenerating a differentiated transformed plant from the stably transformed plant tissue or cells.
66. (Original) The method of claim 57 or 62 wherein one agent is a sulfhydryl-containing agent.
67. (Original) The method of claim 66 wherein one agent is cysteine.

68. (Original) The method of claim 57 or 62 wherein one agent is glutathione, sodium thiosulfate, or dithiothreitol.
69. (Original) The method of claim 57 or 62 wherein one agent is an iron chelator or a copper chelator.
70. (Original) The method of claim 57 or 62 wherein one agent inhibits plant polyphenol oxidase or inhibits plant peroxidase.
71. (Original) The method of claim 57 or 62 wherein the recombinant DNA comprises a selectable marker.
72. (Original) The method of claim 57 or 62 wherein the recombinant DNA comprises a detectable marker.
73. (Original) The method of claim 57 or 62 wherein the recombinant DNA comprises a promoter operably linked to an open reading frame of interest.
74. (Original) The method of claim 68 wherein the glutathione is present at 0.4 g/L or 0.001 to 1 mM, sodium thiosulfate is present at 0.1 to 20 mM, or dithiothreitol is present at 1 g/L or 0.75 to 2 mM.
75. (Original) The method of claim 57 or 62 wherein the plant tissue or cells are maize, wheat, sugarcane or rice tissue or cells.
76. (New) The method of claim 57 or 62 wherein the plant tissue or cells are maize, wheat or rice tissue or cells.